

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
NATIONAL SCIENCE AND TECHNOLOGY)	
NETWORK, INC.)	
)	
Licensee of Industrial/Business Pool Stations)	File Nos. 0002919012, 0002919013,
WQJD998, WQIP838, and WQKK919)	0003431479
)	
Applications for Authority to Operate on)	File Nos. 0003697839, 0004290038
Frequency Pair 471/474.25000 MHz)	

ORDER OF MODIFICATION AND ORDER

Adopted: February 23, 2011

Released: February 24, 2011

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

1. *Introduction.* This item generally denies a protest¹ against our *Order Proposing Modification*² in this proceeding, and modifies the licenses of National Science and Technology Network, Inc. (NSTN) for three private land mobile radio stations. The *Order Proposing Modification* concluded that NSTN's licenses should be modified because the underlying applications should not have been granted. After consideration of the protest and the responsive pleadings,³ we conclude that the licenses should be modified as proposed. Therefore, we deny the protest. The licenses for Industrial/Business Pool Stations WQJD998 and WQKK919 will be modified thirty days after release of this *Order of Modification and Order*; the license for Industrial/Business Pool Station WQIP838 will be modified ninety days after release of this *Order of Modification and Order*.

2. In addition, NSTN filed two applications for authority to operate on frequency pair 471/475.2500 MHz at or near a location where that frequency pair is being deleted from NSTN's license for Station WQIP838.⁴ Mobile Relay Associates (MRA) filed informal objections to both applications.⁵

¹ Protest of National Science and Technology Network to Proposed Order of Modification (filed March 31, 2010) (Protest).

² National Science and Technology Network, Inc., *Order Proposing Modification*, 25 FCC Rcd 2124 (WTB 2010) (*Order Proposing Modification*).

³ Mobile Relay Associates (MRA) filed an opposition. Opposition to Protest (filed April 10, 2010) (Opposition). NSTN filed a reply. Reply to Opposition to Mobile Relay Associates to the Protest of National Science and Technology Network, Inc. to Proposed Order of Modification (filed April 9, 2010) (Reply). NSTN later filed a supplemental declaration. Supplemental Declaration of Alan M. Lurya in Support of Protest of National Science and Technology Network to Proposed Order of Modification (filed April 27, 2010) (Supplemental Declaration). MRA moved to strike the Supplemental Declaration as an unauthorized pleading. See Motion to Strike (filed April 27, 2010). As discussed *infra*, we do not find the information in the Supplemental Declaration to be material. Consequently, we need not address the motion to strike it.

⁴ See FCC File Nos. 0003967839 (filed Sept. 17, 2009), 0004290038 (filed June 21, 2010).

⁵ Informal Objection (filed August 26, 2010) (0003967839 Objection); Informal Objection (filed August 26, 2010) (0004290038 Objection).

For the reasons set forth below, we deny the objection to one application and grant in part the objection to the other application, and will process the applications accordingly.

3. *Background.* The above-captioned stations are authorized to operate on 12.5 kHz “offset” frequencies in the 470-512 MHz band. In 1997, the Commission directed the certified frequency coordinators for the private land mobile radio services to reach a consensus on the applicable coordination procedures for the 12.5 kHz offset channels in the 470-512 MHz band.⁶ That consensus is embodied in the Land Mobile Communications Council (LMCC) procedures for evaluating adjacent channel interference in the 470-512 MHz band using the interference criteria of TIA/EIA/TSB-88 (TSB-88).⁷ The LMCC Consensus provides that an application shall not be certified if either the applicant or an overlapping incumbent has unacceptable interference of more than five percent reduction of the calculated service area reliability.⁸

4. NSTN Protest of Proposed Modification. NSTN’s license for Station WQJD998, authorizing operations at San Sevaine Peak and San Rafael Hills, California, was granted on April 9, 2008.⁹ NSTN’s licenses for Station WQIP838, authorizing operations at Rancho Palos Verdes and San Rafael Hills, California,¹⁰ and Station WQKK919, authorizing operations at San Rafael Hills,¹¹ were granted on May 28, 2008. On November 4, 2008, MRA requested modification of the licenses on the grounds that certain frequency pairs¹² were not properly coordinated because, *inter alia*, they did not satisfy the TSB-88 interference protection criteria. In its response, NSTN requested a hearing with respect to whether it was causing interference, and whether license modification would be in the public interest.

5. The Wireless Telecommunications Bureau’s Mobility Division (Division) issued an *Order Proposing Modification* on March 4, 2010. The Division stated that its engineering review confirmed that the NSTN channels specified by MRA did not satisfy the requirements of TSB-88,¹³ and it proposed, pursuant to Section 316 of the Communications Act of 1934, as amended,¹⁴ to (1) modify NSTN’s license for Station WQJD998 by reducing the maximum authorized power at locations 1 and 3 (San Sevaine

⁶ See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Services, *Second Report and Order*, PR Docket No. 92-235, 12 FCC Rcd 14307, 14330-31 ¶ 43 (1997).

⁷ See Filing Freeze to be Lifted for Applications under Part 90 for 12.5 kHz Offset Channels in the 421-430 and 470-512 MHz Bands, *Public Notice*, 13 FCC Rcd 5942, 5942 (WTB 1997) (citing Letter from Larry A. Miller, President, LMCC, to Daniel B. Phythyon, Esq., Acting Chief, Wireless Telecommunications Bureau (Sept. 10, 1997) (LMCC Consensus)).

⁸ See LMCC Consensus, Attachment at 2.

⁹ See FCC File No. 0002919012 (filed February 20, 2007).

¹⁰ See FCC File No. 0002919013 (filed February 20, 2007).

¹¹ See FCC File No. 0003431479 (filed May 7, 2008). The license initially was granted under Call Sign WQIV646. On reconsideration, the application was returned to pending status and dismissed in part, and the remaining frequencies were regranted under Call Sign WQKK919. See National Science and Technology Network, Inc., *Order on Reconsideration*, 24 FCC Rcd 8447, 8448 ¶¶ 4, 6 (WTB MD 2009), *aff’d*, 25 FCC Rcd 10628 (WTB MD 2010).

¹² Specifically, frequency pair 472/475.4750 MHz at San Sevaine Peak and San Rafael Hills (Station WQJD998), frequency pair 471/474.2500 MHz at San Rafael Hills and Rancho Palos Verdes (Station WQIP838), and frequency pairs 471/474.5000 and 472/475.8250 MHz at San Rafael Hills (Station WQIV646). See Consolidated Request for Modification and Petition for Reconsideration at Ex. A (filed Nov. 4, 2008).

¹³ See *Order Proposing Modification*, 25 FCC Rcd at 2125 ¶ 4. The Division rejected NSTN’s arguments that TSB-88 did not apply to the instant case. *Id.* at 2125-26 ¶ 4.

¹⁴ 47 U.S.C. § 316.

Peak) to fifteen watts effective radiated power (ERP), reducing the number of units at location 2 to ninety, and deleting locations 4-6 (San Rafael Hills); (2) modify NSTN's license for Station WQIP838 by deleting frequency pair 471/474.2500 MHz; and (3) modify NSTN's license for Station WQKK919 by deleting frequency pairs 471/474.5000 MHz and 472/475.8250 MHz.¹⁵ The Division concluded that the proposed modifications would serve the public interest by allowing NSTN to continue serving customers, while avoiding or reducing harmful interference.¹⁶

6. The Division also denied NSTN's hearing request, noting that a hearing prior to license modification is warranted only when the licensee presents a substantial and material question of fact.¹⁷ The Division concluded that NSTN had not met this standard, because its arguments for why it could not be causing interference had been rejected previously, and NSTN had presented no evidence with respect to whether the public interest was better served by its operations than by license modification.¹⁸

7. Pending NSTN Applications. On September 17, 2009, NSTN filed an application to modify its license for Station WQIP838 by adding a mobile service area with a forty-eight kilometer radius centered around coordinates approximately forty-four kilometers from Rancho Palos Verdes.¹⁹ The application seeks authorization to operate on channels already authorized under that license, including frequency pair 471/475.2500 MHz. It proposes operation with an occupied bandwidth of 4.0 kilohertz, rather than the current 11.25 kilohertz. MRA later filed an informal objection, arguing that NSTN should not be permitted to expand its operations on a frequency pair that the *Order Proposing Modification* concluded should not have been assigned to Station WQIP838 in the first place.²⁰

8. On June 21, 2010, NSTN filed an application for a new station operating on frequency pair 471/475.2500 MHz at Rancho Palos Verdes.²¹ It proposes emission designators with occupied bandwidths of 4.0 kilohertz and 7.0 kilohertz. MRA filed an informal objection, arguing that NSTN should not be granted a new license on a frequency pair that the *Order Proposing Modification* concluded should not have been assigned to NSTN at that location.²²

9. Discussion. NSTN Protest of Proposed Modification. In its protest, NSTN argues that modification of its licenses would not promote public interest, convenience, and necessity.²³ It states that it is an innocent victim of improper frequency coordination, and should not be penalized for it.²⁴ NSTN disputes MRA's assertion²⁵ that NSTN is causing interference,²⁶ and argues that license modification is inappropriate in the absence of actual interference.²⁷ NSTN further argues that it has made a large

¹⁵ See *Order Proposing Modification*, 25 FCC Rcd at 2125 ¶ 5.

¹⁶ *Id.*

¹⁷ *Id.* at 2127 ¶ 7 (citing National Science and Technology Network, Inc., *Memorandum Opinion and Order*, 23 FCC Rcd 3214, 3219 ¶ 12 (2008)).

¹⁸ *Id.*

¹⁹ See FCC File No. 0003967839 (filed September 17, 2009).

²⁰ See 0003967839 Objection at 2.

²¹ See FCC File No. 0004290038 (filed June 21, 2010).

²² See 0004290038 Objection at 2-3.

²³ See Protest at 1-2.

²⁴ See *id.* at 7-8.

²⁵ See Opposition at 5-6.

²⁶ See Protest at 3-6.

²⁷ See *id.* at 3-4.

investment in the subject stations, and built up a large customer base that relies on these operations.²⁸ NSTN again requests an evidentiary hearing.²⁹ We find NSTN's arguments unpersuasive.

10. NSTN does not dispute that its applications for the stations at issue were improperly coordinated, and that if the proper analysis had been performed, it would have revealed that the proposed operations did not satisfy the TSB-88 interference protection criteria with respect to MRA's incumbent stations. Reliance on a frequency coordinator's error is not grounds to preserve a license that was granted based on a defective coordination.³⁰

11. Moreover, actual interference is not required in order to modify a license under Section 316.³¹ Only when coupled with other factors, such as a long period between the grant of the license and filing of the modification request, does the absence of the evidence of actual interference support a conclusion that modification would not be in the public interest.³² The instant case, however, does not present this scenario. NSTN's stations were put into operation between April and September 2008,³³ and MRA filed its modification request in November. We therefore disagree with NSTN that modification is not warranted if MRA has not shown actual interference with its operations.³⁴

12. We also disagree with NSTN's request that we not modify the licenses because NSTN had made a large investment in these operations and built a large customer base that relies on them. As noted above, MRA filed its modification request shortly after NSTN placed these stations into operation. NSTN was thus on notice that the validity of the subject licenses was in dispute, but nevertheless chose to expand its operations and add customers at its own risk.³⁵

13. Finally, NSTN states that it would be significantly harmed by deleting frequency pair 471/474.2500 MHz from the license for Station WQIP838 because that is the system's home channel, and NSTN would have to reprogram thousands of mobile units.³⁶ We note, however, that Station WQIP838 is

²⁸ See *id.* at 2, 5-7.

²⁹ See *id.* at 3, 5, 8.

³⁰ See National Science and Technology Network, Inc., *Order*, 23 FCC Rcd 273, 274 ¶ 5 (WTB MD 2008) (ordering license modification notwithstanding NSTN's argument that it relied on its frequency coordinator); see also, e.g., JSM Systems, Inc., *Order on Reconsideration*, 15 FCC Rcd 23744, 23745 ¶ 4 (WTB PSPWD 2000) ("an applicant must be responsible for the accuracy and adequacy of any submission made on its behalf") (citing Request for Review of the Universal Service Administrator by United Talmudical Academy, New York, *Order*, 15 FCC Rcd 423, 431 ¶ 15 (2000)); Midwest Bell Communications, *Order on Reconsideration*, 15 FCC Rcd 11005, 11007 ¶ 6 (WTB PSPWD 2000). Moreover, NSTN's assertion that it should not suffer for its frequency coordinator's error does not explain why it would better serve the public interest for MRA to bear the consequences of NSTN's defective coordination. See Opposition at 9.

³¹ See California Metro Mobile Communications, Inc., *Memorandum Opinion and Order*, 17 FCC Rcd 22974, 22977 ¶ 11 (2002), *aff'd sub nom.* California Metro Mobile Communications, Inc. v. FCC, 365 F.3d 38 (D.C. Cir. 2004).

³² See, e.g., Allegheny County Sanitary Authority, *Order*, 25 FCC Rcd 17831, 17832 ¶ 5 (WTB MD 2010).

³³ See FCC File Nos. 0003434487 (filed May 12, 2008) (construction notification for Station WQIP838), 0003526023 (filed July 31, 2008) (construction notification for Station WQIV646), 0003907154 (filed July 21, 2009) (construction notification for Station WQJD998).

³⁴ Consequently, we need not resolve the dispute between the parties as to whether MRA is currently experiencing interference, and therefore will not address MRA's motion to strike NSTN's Supplemental Declaration, which asserts that its monitoring did not detect any MRA operations with which NSTN could interfere.

³⁵ See National Science and Technology Network, Inc., *Order on Further Reconsideration*, 24 FCC Rcd 3577, 3580 ¶ 8 (WTB MD 2009), *aff'd*, 25 FCC Rcd 11384 (2010).

³⁶ See Protest at 5.

authorized for nine frequency pairs, all authorized at the same locations and with the same power and other technical parameters, but NSTN chose to use the one frequency pair that was in dispute for the home channel. We do not view this choice as a reason to shield the license from the proposed modification. In light of the effort involved in reprogramming the mobile units,³⁷ however, we will delay the effectiveness of the modification of the license for Station WQIP838 until ninety days after release of this *Order of Modification and Order*.

14. Pending NSTN Applications. As noted above, NSTN's application to modify its license for Station WQIP838 to authorize use of, *inter alia*, frequency pair 471/475.2500 MHz in a new mobile service area proposes operation with an occupied bandwidth of 4.0 kilohertz. Subsequent to the filing of MRA's informal objection to this application, the Division clarified that there is no spectral overlap between proposed operations with a 4.0 kilohertz occupied bandwidth and incumbent operations with a 20 kilohertz bandwidth when the center frequencies are 12.5 kilohertz removed from each other, so no TSB-88 analysis is required.³⁸ Consequently, we reject MRA's suggestion that the proposed operations are improper on the same grounds as NSTN's operation on that channel with an 11.25 kHz occupied bandwidth. We therefore deny MRA's informal objection, and will process the application accordingly.

15. For the same reasons, we deny MRA's informal objection to NSTN's application for a new license for frequency pair 471/475.2500 MHz at Rancho Palos Verdes, to the extent that the application proposes operations with a 4.0 kilohertz occupied bandwidth. There is, however, spectral overlap between proposed operations with a 7.0 kilohertz occupied bandwidth and incumbent operations with a 20 kilohertz bandwidth when the center frequencies are 12.5 kilohertz removed from each other. The proposed 7.0 kilohertz operations therefore must satisfy the TSB-88 interference criteria. Our own engineering analysis concludes that NSTN's proposed operations with an occupied bandwidth of 7.0 kilohertz would degrade the licensed service area of MRA's Station WIJ867 by more than five percent. As a result, based on the information before us, we find that the coordination of the NSTN application appears to be defective with respect to operation on with an occupied bandwidth of 7.0 kilohertz, because the proposed operations would not afford the required protection to MRA's incumbent operations. We therefore will grant the application to authorize only an occupied bandwidth of 4.0 kilohertz.

16. *Conclusion and Ordering Clauses.* Based on the record before us, we conclude that it is in the public interest to (1) modify NSTN's license for Industrial/Business Pool Station WQJD998 by reducing the maximum authorized power at locations 1 and 3 (San Sevaine Peak) to fifteen watts ERP, reducing the number of units at location 2 to ninety, and deleting locations 4-6 (San Rafael Hills); (2) modify NSTN's license for Industrial/Business Pool Station WQIP838 by deleting frequency pair 471/474.2500 MHz; and (3) modify NSTN's license for Industrial/Business Pool Station WQKK919 by deleting frequency pairs 471/474.5000 MHz and 472/475.8250 MHz. NSTN has presented no material question of fact, so we again deny its request for a hearing on the matter. We also dismiss in part NSTN's application for a new station on frequency pair 471/474.2500 MHz at Rancho Palos Verdes, California, as defectively coordinated because it does not meet the TSB-88 interference protection criteria. We will otherwise process that application, and NSTN's application to modify its license for Station WQIP838.

17. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 316(a) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 316(a), and Section 1.87 of the Commission's Rules, 47 C.F.R. § 1.87, that the licenses of National Science and Technology Network, Inc. (1) for Industrial/Business Pool Station WQJD998 BE MODIFIED by reducing the maximum authorized power at locations 1 and 3 to fifteen watts ERP, reducing the number of units at location 2 to ninety, and deleting locations 4-6; (2) for Industrial/Business Pool Station WQIP838 BE MODIFIED by deleting

³⁷ See *id.*; Reply at 7.

³⁸ See Mark A. Lidikay, *Order on Reconsideration*, 25 FCC Rcd 15895, 15896-87 ¶¶ 4-7 (WTB MD 2010).

frequency pair 471/474.2500 MHz; and (3) for Industrial/Business Pool Station WQKK919 BE MODIFIED by deleting frequency pairs 471/474.5000 MHz and 472/475.8250 MHz. The modifications to the licenses for Stations WQJD998 and WQKK919 are effective thirty days after release of this *Order of Modification and Order*; the modification to the license for Station WQIP838 is effective ninety days after release of this *Order of Modification and Order*.

18. IT IS FURTHER ORDERED, pursuant to Sections 4(i) and 303(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(i), and Section 1.934 of the Commission's Rules, 47 C.F.R. § 1.934, that the informal objection filed by Mobile Relay Associates on August 26, 2010 with respect to application FCC File No. 0003967839 IS DENIED, and the application SHALL BE PROCESSED in accordance with this *Order of Modification and Order* and the Commission's Rules.

19. IT IS FURTHER ORDERED, pursuant to Sections 4(i) and 303(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(i), and Section 1.934 of the Commission's Rules, 47 C.F.R. § 1.934, that the informal objection filed by Mobile Relay Associates on August 26, 2010 with respect to application FCC File No. 0004290038 IS GRANTED IN PART and DENIED IN PART, and the application SHALL BE DISMISSED IN PART and PROCESSED in accordance with this *Order of Modification and Order* and the Commission's Rules.

20. IT IS FURTHER ORDERED that this *Order of Modification and Order* SHALL BE SENT by certified mail, return receipt requested, to: (1) National Science and Technology Network, Inc., Attn: Ted S. Henry, 2050 S. Bundy Drive, Suite 285, Los Angeles, CA 90025; (2) Alan M. Lurya, 18662 Irvine Blvd., Suite 200, Irvine, CA 92612; and (3) Professional Licensing Consultants, Inc., Attn: Josie Lynch, P.O. Box 1714, Rockville, MD 20849.

21. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATION COMMISSION

Scot Stone
Deputy Chief, Mobility Division
Wireless Telecommunications Bureau